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ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:941153 HCAPLUS

DOCUMENT NUMBER: 151:225185

Manufacturing method of iodine TITLE:

INVENTOR(S): Aizawa, Akira

PATENT ASSIGNEE(S): Ise Chemical Industries Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATE APPLICATION NO. PATENT NO. KIND DATE DATE JP 2009173462 A JP 2009173462 A 20090806 JP 2008-10723 20080121 PRIORITY APPLN. INFO.: JP 2008-10723 20080121 AB Iodine is manufactured by reacting iodine ion-containing solution having

iodine concentration ≤30 g/L (calculated as I2) with NaClO3 as oxidizing agent, purifying and then crystallizing to obtain

≥99.7% pure iodine crystals.

ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1366525 HCAPLUS

DOCUMENT NUMBER: 149:515889

TITLE: Method for removal of lead from aqueous cobalt

chloride solutions

INVENTOR(S): Yokokawa, Tomohiko; Amano, Osamu; Sugita, Izumi;

Ozaki, Yoshitomo

PATENT ASSIGNEE(S): Sumitomo Metal Mining Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. JP 2008274382 A 20081113
PRIORITY APPLN. INFO.: _____ ____ _____ ______

 JP 2007-122161
 20070507

 JP 2007-122161
 20070507

 AB Aqueous Co chloride solution containing Pb is treated by addition of sulfidizing agents,

e.g. hydrogen sulfide gas, and pH adjustors, e.g. HCl, Co carbonate, and adjustment of its redox potential of -50 to -0 mV vs. Ag/AgCl and its pH

to 1.0-2.0 for precipitation of lead sulfide and to give aqueous Co chloride solution of

<1.0 mg/L Pb. The thus obtained aqueous Co chloride solution is further treated

by addition of oxidizing agents, e.g. chlorine gas, and pH adjustors, e.g. Co carbonate, and adjustment of its redox potential to 910-1050 mV vs.

Aq/AqCl and its pH to 2.2-3.0 for precipitation of lead oxide and to give purified

aqueous Co chloride solution The process may also be used for removal of metals

other than Pb from aqueous Co chloride solns.

ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:974381 HCAPLUS

DOCUMENT NUMBER: 149:244410

TITLE: Purification of L-cysteine by ion exchange

chromatography

INVENTOR(S): Boehm, Andreas

PATENT ASSIGNEE(S): Wacker Chemie A.-G., Germany SOURCE: U.S. Pat. Appl. Publ., 6pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080190854	 A1	20080814	US 2008-26567	20080206
DE 102007007333	A1	20080821	DE 2007-102007007333	20070214
EP 1958933	A1	20080820	EP 2008-150940	20080201
R: AT, BE, BG,	CH, CY	, CZ, DE, DK,	, EE, ES, FI, FR, GB,	GR, HR, HU,
IE, IS, IT,	LI, LT	, LU, LV, MC,	, MT, NL, NO, PL, PT,	RO, SE, SI,
SK, TR, AL,	BA, MK	, RS		
JP 2008194043	A	20080828	JP 2008-28833	20080208
CN 101245042	A	20080820	CN 2008-10005660	20080214
PRIORITY APPLN. INFO.:			DE 2007-102007007333A	20070214
AB L-Cysteine is separ	ated fr	om an L-cyste	eine-containing fermen	ter broth
containing an				

oxidizing agent which is capable of oxidizing L-cysteine at pH < 5, by contacting the L-cysteine-containing fermenter broth with an ion exchanger at a pH from 5 to 9, the pH in the fermenter broth becoming <5, and preferably <2. The L-cysteine binds to the ion exchanger and the bound L-cysteine is then removed from the ion exchanger by means of an eluant.

ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:835287 HCAPLUS

DOCUMENT NUMBER: 149:217825

TITLE: Purification and wash performance analysis of

thermostable extracellular alkaline protease produced

by soil bacterium Bacillus sp. GOS-2

Selvakumar, R.; Kumar, R. Sathish; Swaminathan, K. AUTHOR(S): CORPORATE SOURCE:

Microbial Biotechnology Division, Department of

Biotechnology, Bharathiar University, Tamil Nadu, 641

046, India

SOURCE: Asian Journal of Microbiology, Biotechnology & Environmental Sciences (2007), 9(4), 911-917

CODEN: AJMBAQ; ISSN: 0972-3005

PUBLISHER: Global Science Publications

DOCUMENT TYPE: Journal LANGUAGE: English

AB The purpose of the research was to study the purification, characterization and industrial application of alkaline protease produced by newly isolated Bacillus sp. GOS-2 from soil samples collected in and around Coimbatore, Tamilnadu, India. The enzyme was purified in a 2-step procedure,

involving acetone precipitation and Sephadex G-100 gel filtration chromatog.

The

purified enzyme was subjected to SDS-PAGE for determining the mol. weight and was $% \left(1\right) =\left(1\right) +\left(1\right) +$

found to be 18 kDa. The enzyme had a maximum activity at 60°C and pH 10. The compatibility of the enzyme was studied with surfactant, oxidizing agent, optical brightener and com. detergents in the absence of stabilizers. Increase in the concentration of the surfactant and oxidizing agent

decreased the enzyme activity whereas optical brightener did not have any effect on the enzyme activity. The enzyme was found to retain maximum enzyme activity of 93.84% with Power detergent powder when compared to other detergents. The efficacy of the purified alkaline protease was tested with 1%(w/v) Power detergent on blood stained cloth for its wash performance. The enzyme was effective in removal of 25 mL of bloodstain along with Power detergent powder at 55°C. The compatibility and stain removal properties of protease find potential application in detergents industry.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:815242 HCAPLUS

DOCUMENT NUMBER: 149:217820

TITLE: Purification and wash performance analysis of

thermostable extracellular alkaline protease produced

by soil bacterium Bacillus sp. GOS-2

AUTHOR(S): Selvakumar, R.; Kumar, R. Sathish; Swaminathan, K.

CORPORATE SOURCE: Microbial Biotechnology Division, Department of

Biotechnology, Bharathiar University, Coimbatore, 641

046, India

SOURCE: Asian Journal of Microbiology, Biotechnology &

Environmental Sciences (2008), 10(1), 29-35

CODEN: AJMBAQ; ISSN: 0972-3005

PUBLISHER: Global Science Publications

DOCUMENT TYPE: Journal LANGUAGE: English

AB The purpose of this work was to study the purification, characterization and industrial application of alkaline protease produced by newly isolated Bacillus sp. GOS-2 from soil samples collected in and around Coimbatore, Tamilnadu, India. The enzyme was purified in a 2-step procedure,

involving acetone precipitation and Sephadex 0-100 gel filtration chromatog.

The

purified enzyme was subjected to SDS-PAGE for determining the mol. weight and was

found to be 18 kDa. The enzyme had a maximum activity at $60\,^{\circ}\text{C}$ and pH 10. The compatibility of the enzyme was studied with surfactant,

oxidizing agent, optical brightener and com. detergents in the absence of stabilizers. Increase in the concentration of the surfactant and oxidizing agent

decreased the enzyme activity whereas optical brightener did not have any effect on the enzyme activity. The enzyme was found to retain maximum enzyme activity of 93.84% with Power detergent powder when compared to other detergents. The efficacy of the purified alkaline protease was tested with 1% (w/v) Power detergent on blood stained cloth for its wash performance. The enzyme was effective in removal of $25\mu m$ of bloodstain along with Power detergent powder at $55\,^{\circ}\text{C}$. The compatibility and stain removal properties of protease find potential application in detergents industry.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:552985 HCAPLUS

DOCUMENT NUMBER: 150:103644

TITLE: Effects of different reagents on the purification of

ultra fine diamond

AUTHOR(S): Yang, Xiaoguang; Hou, Shu'en; Jin, Hongyun; Pan, Yong

CORPORATE SOURCE: China University of Geosciences, Wuhan, 430074, Peop.

Rep. China

SOURCE: Jingangshi Yu Moliao Moju Gongcheng (2008), (1), 43-46

CODEN: JMMGFU; ISSN: 1006-852X

PUBLISHER: Jingangshi Yu Moliao Moju Gongcheng Zazhishe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB In this report, ultra-fine diamond powder after rough purification was used as raw material for further purification, and some kinds of reagents, such as

cerium salts, fluorides and persulfates, were selected to test their

effects of purification The comprehensive comparison and analyses were carried out based on a large number of tests and purification processes. It is found

t.hat.

environmental protection type strong oxidants assorting with desilication agent, solution of Na2S208 and KF·2H2O for instance with concns. in the range of 0.4 g/mL-0.5 g/mL and 0.35 g/mL-0.5 g/mL, resp., can greatly improve the purification of ultra-fine diamond to 99.90% under the reaction condition of 8h to 10h and high temperature of $180 \, ^{\circ}\text{C}$ to $200 \, ^{\circ}\text{C}$ in closed vessel.

L2 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:810863 HCAPLUS

DOCUMENT NUMBER: 147:145653

TITLE: Method and apparatus for purification of oxidizing

agents

INVENTOR(S): Iiyama, Masamitsu; Kojima, Senri; Abe, Akira

PATENT ASSIGNEE(S): Nomura Micro Science Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2007185581 A 20070726 JP 2006-4432 20060112 JP 2006-4432 20060112 PRIORITY APPLN. INFO.:

Purifn.of oxidizing agent solns. is carried out by their contacting with inorg. adsorbents, e.g. ion exchangers. Apparatus for purification of the

includes a column filled with the adsorbents.

ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:463059 HCAPLUS

DOCUMENT NUMBER: 146:447569

TITLE: Method of purification of the natural and waste waters

by filtration

INVENTOR(S): Girikov, O. G.; Bochkarev, G. R.; Kondrat'ev, S. A. PATENT ASSIGNEE(S): Institut Gornogo Dela Sibirskogo Otdeleniya RAN,

Russia

Russ., 6pp. SOURCE:

CODEN: RUXXE7

DOCUMENT TYPE: Patent LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

DATE APPLICATION NO. KIND DATE -----RU 2297983 C1 20070427 RU 2005-136969 20051128 RU 2005-136969 20051128 PRIORITY APPLN. INFO.: The invention is pertaining to the field of purification of the natural, recirculated waters and the industrial waste waters, predominantly, from iron, manganese, the ions of the heavy metals and the organic impurities and may be used in some processes of the ores dressing and in hydrometallurgy. The method provides for mixing of the subjected to the purification waste water with the sorbent, the subsequent feeding of the mixture in the layer of the granular loading till pollution of the former, suspension of the filtration process, delivery of the washing water in the direction of expansion of the layer of the granular loading till its cleansing from the pollutions, intermixing of the sorbent with the part of the delivered cleansing water, feeding of the given mixture into the expanded layer of the granular loading, the extinction of the cleansing and resumption of the filtration process. The being purified water or its mixture with the sorbent before feeding into the layer of the granular loading is aerated and-or it is introduced with another oxidizing substance. As the granular loading or its the most remote part in the downstream of the filtration they use the crushed psilomelane, and as the sorbent - the crushed brucite. The method ensures the increased efficiency of the filtration and reduction of the waste water purification cost due to reduced consumption

the sorbent and the cleansing water.

ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:165614 HCAPLUS

DOCUMENT NUMBER: 146:212147

TITLE: Treatment of water contaminated with organic arsenic

compounds by condensation separation and oxidation

INVENTOR(S): Otsuka, Tsuyoki; Ida, Toru; Ano, Shintaro; Nakayama,

Junpei

of

PATENT ASSIGNEE(S): Kobe Steel, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. ______ JP 2007038113 _____ A 20070215 JP 2005-224435 20050802 JP 2005-224435 20050802 PRIORITY APPLN. INFO.:

The treatment method for water containing ≥1 organic As compds. selected from diphenylchloroarsine, diphenylcyanoarsine, bis(diphenylarsine) oxide, diphenylarsinic acid, and phenylarsonic acid involves (A) concentrating the contaminated water for separating into condensed contaminated water and non-contaminated water and (B) subjecting the condensed water to oxidation decomposition by oxidants at $75-100^{\circ}$. The invention provides a treatment method for organic As compds. of chemical weapon origin.

ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1226978 HCAPLUS

DOCUMENT NUMBER: 145:510839

Method of purifying soil and/or groundwater TITLE:

Tasaki, Ken; Hiramatsu, Yasushi INVENTOR(S):

Mitsubishi Gas Chemical Company, Inc., Japan PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 19pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA]	ENT 1	NO.			KIN	D	DATE			APP	LICAT	ION :			D	ATE	
	WO	2006	 1235	 74		A1	_	2006	1123		WO	 2006-				2	0060	 511
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	ВВ	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KΕ,	KG,	KM,	KN,	KP,	KR,
			KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY	, MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PΗ	, PL,	PT,	RO,	RU,	SC,	SD,	SE,
	SG, SK, S VN, YU, 2				SL,	SM,	SY,	ТJ,	TM,	TN,	TR	, TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
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			IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PΤ	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML	, MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	$_{ m TM}$										
	KR	2008	0165	69		Α		2008	0221		KR	2007-	7269	8 0		2	0071	119
	CN	1011	8014	1		Α		2008	0514		CN	2006-	8001	7296		2	0071	119
PRIOR	RITY	APP:	LN.	INFO	.:						JΡ	2005-	1463	60		A 2	0050	519
											WO	2006-	JP30	9519	1	W 2	0060	511
OTHER	0.0	TIDOR	/ C \ .			MAD.	ידיתם	1/5.	5100°	2.0								

OTHER SOURCE(S): MARPAT 145:510839

A method for purifying soil and/or groundwater polluted by persistent organic compds. is provided, which effectively reduces the environmental load. The treatment method includes an addition of a biodegradable chelating agent

dicarboxymethylamine to the Fe-containing contaminated soils or groundwater, at a molar ratio of 0.5-4.0 to 1 of iron ion present, thereby forming a complex of biodegradable chelating agent and iron ion; adjusting and maintaining the pH of the soil or groundwater to pH 5-10; and addition of oxidizing agents.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:383125 HCAPLUS

DOCUMENT NUMBER: 144:392536

TITLE: Method for purifying residual components in pressure

sensitive adhesives

INVENTOR(S): Zhu, Dong-Wei; Moore, Cheryl L.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA; Wolter, James

Т.

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
WO	2006	0445	90		A1	_	2006	0427		 WO 2	005-	 US36	 924		2	 0051	013
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
		NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,
		SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,
		YU,	ZA,	ZM,	ZW												
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	${ m MZ}$,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	$_{ m MT}$										
CA	2583	963			A1		2006	0427		CA 2	005-	2583	963		2	0051	013
	1802				A1		2007	0704		EP 2	005-	8102	91		2	0051	013
EP	1802						2009										
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
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The method comprises: (A) providing an initial reaction product of a solution polymerization reaction, comprising polymer, unreacted polymerizable reactant, non-polymerizable material, and solvent; and (B) purifying the initial reaction product by adding an oxidizing agent and a reducing agent to the initial reaction product and allowing the unreacted polymerizable reactant

in the initial reaction product to further react, thereby providing a second reaction product comprising addnl. polymer and a lower level of unreacted polymerizable reactant than was present in the initial reaction product. Thus, isooctyl acrylate and acrylamide were polymerized according to conventional procedure, to which 1000 ppm tertiary amyl hydroperoxide, 1000 ppm vitamin C, and 20 ppm vanadyl sulfate hydrate were added to reduce the content of unreacted residual components.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

2005:1117109 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 144:8668

Purification processes for onion-shaped fullerenes TITLE: INVENTOR(S): Xu, Bingshe; Bao, Huiqiang; Han, Peide; Jia, Husheng;

Liu, Xuguang; Wei, Yinghui; Wang, Xiaomin

PATENT ASSIGNEE(S): Taiyuan University of Technology, Peop. Rep. China SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 13 pp.

CODEN: CNXXEV DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1565964	A	20050119	CN 2004-10012275	20040429
CN 1232440	С	20051221		
PRIORITY APPLN. II	NFO.:		CN 2004-10012275	20040429

The following five relatively simple independent purification processes for onion-shaped fullerenes are disclosed. First process comprises grinding, treating in an aqueous HCl-H2SO4-HNO3 solution, filtering, washing with deionized

water, oven-drying, heating at 400-550 °C, and cooling. Second process comprises grinding, extracting with CS2 or toluene in a soxhlet extractor, filtering, washing with deionized water, oven-drying, placing in a container, adding sulfuric acid solution of potassium dichromate powder, heating to reflux, washing with deionized water, and oven-drying. third process involves grinding, extracting with CS2, toluene, or dimethylbenzene in a soxhlet extractor, oven-drying, heating at 400-600 °C, and cooling;. The fourth process consists of heating in a vacuum furnace at 1500-2000 °C, then cooling, reheating in air at 450-600 °C, and cooling again. The fifth process comprises ball milling, soaking in an aqueous HCl-HNO3 solution, filtering the suspension, washing with deionized water, oven-drying, heating in air at 400-550 °C, and cooling. The processes give fullerenes with purity ≥ 70 %.

ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1021792 HCAPLUS

DOCUMENT NUMBER: 143:321132

TITLE: Purification and refolding of human recombinant

urokinase-type plasminogen activator for

structure-based inhibitor design by protein NMR using

a redox pair-containing refolding buffer

INVENTOR(S): Beaton McAlister, Mark Samuel; Pineda-Lucena, Antonio PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE		
_	2005 2005							0922 1027	;	WO 2	005-	GB87.	3		2	0050	307	
	W: RW:	CN, GE, LK, NO, SY, BW, AZ, EE, RO,	CO, GH, LR, NZ, TJ, GH, BY, ES, SE,	CR, GM, LS, OM, TM, GM, KG, FI, SI,	CU, HR, LT, PG, TN, KE, KZ, FR,	CZ, HU, LU, PH, TR, LS, MD, GB, TR,	DE, ID, LV, PL, TT, MW, RU, GR,	AZ, DK, IL, MA, PT, TZ, MZ, TJ, HU, BJ,	DM, IN, MD, RO, UA, NA, TM, IE,	DZ, IS, MG, RU, UG, SD, AT, IS,	EC, JP, MK, SC, US, SL, BE, IT,	EE, KE, MN, SD, UZ, SZ, BG, LT,	EG, KG, MW, SE, VC, TZ, CH, LU,	ES, KP, MX, SG, VN, UG, CY, MC,	FI, KR, MZ, SK, YU, ZM, CZ, NL,	GB, KZ, NA, SL, ZA, ZW, DE, PL,	GD, LC, NI, SM, ZM, AM, DK, PT,	ZW
EP	1730 R:	271 AT,	BE,	BG,	A2 CH,	CY,	CZ,	1213 DE, NL,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
JP IN	1950 2007 2006 2008 Y APP	500 5282 DN05 0020	260 416	·	А		2007 2007	0418 1011 0803 0124		JP 2 IN 2 US 2 GB 2	007- 006- 007- 004-	8001 5023 DN52 5982 5330 GB87	87 60 80		2 2 2 A 2	0050 0060 0070	307 912 612 310	

AB The invention provides a method for preparing a soluble protein comprising a modified form of urokinase-type plasminogen activator (uPA) or an active fragment thereof, or a variant of either of these which has uPA activity. The method comprises contacting uPA with a refolding buffer at a pH of from 8.5-10.5. The refolding buffer comprises a reducing agent and an oxidizing agent which forms a redox pair, wherein the reducing agent is present in excess compared to the oxidizing agent, and wherein the reducing agent is present in a concentration of at least 5 mM. The redox pair comprises reduced glutathione and oxidized glutathione. The protein is in uniformly stable isotope labeled form. The conditions described above, are more highly reducing, and at higher pH than conventionally used in refolding, provide an exceptionally good yield of high-quality modified uPA. Cloning, expression in E. coli, purification and refolding of isotopically labeled recombinant human uPA is described. Material obtainable in this way forms a further aspect of the invention. It has been refolded in a 'native-like' form and is useful in studies such as NMR anal. to detect uPA ligands. This technique is useful in structure-based inhibitor design by protein NMR (SAR-by-NMR).

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:340481 HCAPLUS

DOCUMENT NUMBER: 142:394542

TITLE: Method for purification of nickel chloride aqueous

solution

INVENTOR(S): Matsumoto, Satoshi; Kawakami, Kazutoshi; Sugita, Izumi

PATENT ASSIGNEE(S): Sumitomo Metal Mining Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005104809	A	20050421	JP 2003-344237	20031002
PRIORITY APPLN. INFO.:			JP 2003-344237	20031002

AB In purification of a Ni chloride aqueous solution containing Co- and Fe ions by oxidation/neutralization process using oxidizing agent and neutralizing agent, a part of Ni(OH)3-containing hydroxides formed in the succeeding oxidation/neutralization process is added to the above stated Ni chloride solution for removing a part of Fe- and Co ions from the solution in advance

pre-process), and then continuing the oxidation/neutralization process. The oxidizing agent is Cl2 gas, and the neutralizing agent is basic Ni carbonate.

L2 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1020075 HCAPLUS

DOCUMENT NUMBER: 141:410626

TITLE: High purity electrolytic sulfonic acid solutions INVENTOR(S): Martyak, Nicholas Michael; Noswitz, Martin; Smith,

Gary S.; Janney, Patrick Kendall; Ollivier, Jean-Marie

PATENT ASSIGNEE(S): Atofina Chemicals, Inc., USA

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA:	FENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
WO	2004	1018	 60		A1	_	2004	 1125	,	WO 2	004-	US12	 887		2	0040	427
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	${ m ML}$,	MR,	ΝE,
		SN,	TD,	ΤG													
AU	2004	2392.	26		A1		2004	1125		AU 2	004-	2392.	26		2	0040	427
ΑU	2004	2392	26		В2		2009	0423									

CA 2525064 A1 A1 20041125 CA 2004-2525064 A1 20060412 EP 2004-760840 20040427 EP 1644558 20040427 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK CN 1788112 A 20060614 CN 2004-80012923 20040427 JP 2006529005 Τ 20061228 JP 2006-532471 20040427 US 20060272950 A1 20061207 US 2005-555362 20051102 IN 2005DN05171 20071005 IN 2005-DN5171 20051110 Α PRIORITY APPLN. INFO.: US 2003-469764P P 20030512 WO 2004-US12887 W 20040427

AB Disclosed is a solution for an electrochem. process, the solution containing a sulfonic acid and having a low concentration of sulfur compds., either low or high valence, that are susceptible to reduction and which is intended for use in electrodeposition, batteries, conductive polymers and descaling processes.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:860620 HCAPLUS

DOCUMENT NUMBER: 142:77041

TITLE: Purification of low-purity sulfur from sulfur recovery

process using iron-oxidizer

INVENTOR(S): Chung, Chae Hun

PATENT ASSIGNEE(S): Lg Petrochemical Co., Ltd., S. Korea

SOURCE: Repub. Korea, No pp. given

CODEN: KRXXFC

DOCUMENT TYPE: Patent LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 227961	B1	19991101	KR 1996-47150	19961021
PRIORITY APPLN. INFO.:			KR 1996-47150	19961021

AB A method for refining low purity sulfur product from a conventional sulfur recovery process is provided to obtain high purity sulfur(≥99.9

weight%) by using an aromatic solvent and oxidant for removing iron. The method

comprises the steps of dissolving low purity sulfur products including FeS, Fe(OH)2 or Fe(OH)3 into an aromatic solvent such as toluene; mixing it with aqueous solution containing an inorg. acid(diluted HNO3 or H3PO4) and an oxidant(KMnO4, HNO3 or O2) at 90-100°C to precipitate iron compds. and dissolve chemical stabilizers used in a conventional sulfur recovery process; filtering to remove iron-ppts.; recrystg. sulfur-dissolved solution at 10°C or lower.

L2 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:117815 HCAPLUS

DOCUMENT NUMBER: 140:145901

TITLE: Purification of polycyclic aromatic compounds

INVENTOR(S): Igarashi, Tatsuya; Takeshima, Yoichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. _____ 20020715 PRIORITY APPLN. INFO.: JP 2002-205952 20020715

MARPAT 140:145901 OTHER SOURCE(S):

The compds., useful as electroluminescent substances, fluorescent dyes, etc., are purified by treatment of crude compds. with oxidizing agents and/or with RX (R = substituent; X = leaving group). Thus, pyrene (purity 97.6%) was oxidized with m-chlorobenzoic acid, and acetone and MeOH added, showing purity 99.8%.

ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:931387 HCAPLUS

DOCUMENT NUMBER: 140:2559

Method for purifying denatured proteins having a TITLE:

desired disulfide bond configuration

INVENTOR(S):

Buus, Soren; Ferre, Henrik

PATENT ASSIGNEE(S):

Kobenhavns Universitet, Den.

PCT Int. Appl., 41 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.			ATE	
	WO	2003	0976	 69		A2	_	2003	1127		WO 2	003-	DK32	4			0030	
	WO	2003	0976	69		А3		2004	0318									
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	ΒA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,
			TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW					
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
	ΑU	2003	2239	36		A1		2003	1202		AU 2	003-	2239.	36		2	0030	515
PRIO	RIT	APP:	LN.	INFO	.:						DK 2	002-	766			A 2	0020	517
										•	WO 2	003-	DK32	4	1	w 2	0030	515
							_								_			

The present invention relates to a method for production of a protein having a AΒ desired fold. This is especially achieved by subjecting a population of proteins to a separation step under non-reducing conditions. This allows for identification of a sub-population of proteins having the disulfide bond configuration resulting in a desired fold. Most often this will be the protein of proper structure and/or function. Thus, by using the novel method the purity of the protein having a desired fold can be increased as compared to the purity of a similar protein produced by a conventional method. Important aspect of the invention is a functional active MHC

heavy chain protein obtainable by the above method and the use of a MHC heavy chain protein in anal. of peptide binding capacity. Oxidized species of murine and human recombinant MHC-I heavy chain monomers were separated by hydrophobic interaction chromatog, under nonreducing and denaturing conditions. One of these isomers was able to undergo efficient refolding and simultaneous peptide binding under acidic conditions.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:356677 HCAPLUS

DOCUMENT NUMBER: 138:355702

TITLE: Refrigeration purifiers

INVENTOR(S): Oke, Simon Forbes

Ozone Manufacturing Pty. Ltd., Australia PATENT ASSIGNEE(S):

PCT Int. Appl., 43 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

F	PAI	ENT I	.OV			KIN		DATE			APPL					D.	ATE	
₩	 10	2003	 0383	 51		A1										2	 0021	104
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,
					•		•	•	SG,	•			•			•	•	
			•	•		•	•		YU,	•	•	•	,	·	,	,	,	,
		RW:	GH,	GM,	KE,	LS,	MW.	MZ.	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW.	AM,	AZ,	BY,
									ΑT,									
									LU,									
									GW,							,	- ,	- ,
A	UA	2002														2	0021	104
A	U	2002	3367	95		В2		2007	0809									
E	ΞP	1456	587			A1		2004	0915		EP 2	002-	7718	85		2	0021	104
		R:	AT,	BE.	CH,	DE.	DK,	ES,	FR,	GB,	GR,	IT.	LI.	LU,	NL.	SE,	MC,	PT,
									MK,								- ,	,
J	JΡ	2005															0021	104
		2005																
PRIORI											AU 2							
0			,								WO 2						0021	
7 T		1	.1				c	. 1						-				

A method and apparatus for the continuous or periodic cleaning and purification of

water or air or surfaces in refrigeration systems, such as ice machines and refrigerated containers. Oxidants and oxidant radicals are produced elec. in a stream of air and the resultant gas is injected into a stream of water or air which flows through the refrigeration system and where further oxidants may be generated in this downstream flow of water or air.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT PUBLISHER:

ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN L2

ACCESSION NUMBER: 2002:826259 HCAPLUS

DOCUMENT NUMBER: 138:221265

TITLE: Preparation of purified KHSO5.H2O and nBu4NHSO5 from

Oxone by simple and efficient methods

AUTHOR(S): Travis, Benjamin R.; Ciaramitaro, Benjamin P.; Borhan,

Babak

CORPORATE SOURCE: Department of Chemistry, Michigan State University,

East Lansing, MI, 48824, USA

SOURCE: European Journal of Organic Chemistry (2002), (20),

3429-3434

CODEN: EJOCFK; ISSN: 1434-193X Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:221265

The chemical of various salt forms of Oxone, an environmentally friendly oxidant, has been investigated. In addition to advances in the preparation of anal. pure KHSO $5\cdot$ H2O and nBu4NHSO5, a soluble form of this oxidant, we have also studied some of the known oxidative chemical that utilizes Oxone as the oxidant. Our results indicate that utilizing purified reagents makes

these reactions easier to workup and amenable to large scale synthesis because the amount of salt in the reaction has been greatly reduced.

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD

(9 CITINGS)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:319851 HCAPLUS

134:328204 DOCUMENT NUMBER:

TITLE:

Method for purifying acetone

INVENTOR(S): Fulmer, John William; Aristovich, Valery Jurievich;

Aristovich, Yury Valerievich; Sokolov, Andrey

Jurievich

PATENT ASSIGNEE(S): General Electric Company, USA

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAI	ENT	NO.			KIN	D	DATE		-	APPL	ICAT	ION I	NO.		D.	ATE	
WO	2001	0307	 35		A1	_	2001	0503	,	 WO 2	000-	 US27	905		2	0001	010
	W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,
		ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,
		MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,
		TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZW								
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
US	6340	777			В1		2002	0122		US 2	000-	6689	96		2	0000	925
BR	2000	0149	11		Α		2002	0611		BR 2	000-	1491	1		2	0001	010

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EP 1226102 A1 20020731 EP 2000-968915 20001010 EP 1226102 B1 20061025
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
    JP 2003512447 T 20030402 JP 2001-533092
                                                             20001010
    CN 1210244
AT 343559
                       С
                            20050713 CN 2000-814508
                                                             20001010
                       T 20061115 AT 2000-968915
    ... 545559
MX 2002003959
                                                             20001010
                      A
                            20021023 MX 2002-3959
                                                              20020419
                                        RU 1999-121965
                                        RU 1999-121965 A 19991022
WO 2000-US27905 W 20001010
PRIORITY APPLN. INFO.:
    A process is described for purifying Me2CO from a crude Me2CO-PhOH mixture
    produced upon oxidizing cumene. In the process, an alkaline agent, e.g.,
    NaOH, and an oxidizing agent, e.g., H2O2, KMnO4, etc., are added to the
    mixture to help remove aldehyde contaminants upon purification
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
                             (1 CITINGS)
REFERENCE COUNT:
                            THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
                       8
                            RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
   ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:772498 HCAPLUS
DOCUMENT NUMBER:
                       133:325105
TITLE:
                      Method for purification and sterilization of a gaseous
                      medium containing contaminating particles
                      Drean, Henri Louis
INVENTOR(S):
                   Ectium BV, Neth.
PATENT ASSIGNEE(S):
                      PCT Int. Appl., 28 pp.
SOURCE:
                       CODEN: PIXXD2
DOCUMENT TYPE:
                      Patent
                      French
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                  KIND DATE APPLICATION NO.
    PATENT NO.
                                                            DATE
                      ____
                                        _____
    WO 2000064499
                      A1 20001102 WO 2000-FR1079 20000425
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ,
            DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,
            IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
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		SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,	YU,	ZW			
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FΙ,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
FR	2792	838			A1	:	2000	1103	I	FR 1	999-!	5320			19	99904	127
FR	2792	838			В1		2001	0727									
CA	2372	230			A1		2000	1102	(CA 2	000 - 2	2372	230		20	000C	425
CA	2372	230			С		2009	0120									
EP	1194	175			A1		2002	0410	I	EP 2	000-9	9227	30		20	000C	425
EP	1194	175			В1		2003	0409									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										
JΡ	2003	5051	19		T	:	2003	0212		JP 2	000-6	6134	88		20	0000	125
ΑT	2366	64			T	:	2003	0415	Ž	AT 2	000-9	9227:	30		20	0000	425
ES	2193	951			Т3		2003	1116	I	ES 2	000-9	9227	30		20	00004	425
RU	2248	808			C2		2005	0327	I	RU 2	001-	1291.	53		20	00004	425

US 7147821 B1 20061212 US 2002-959444 20020729
RITY APPLN. INFO.: FR 1999-5320 A 19990427
WO 2000-FR1079 W 20000425 PRIORITY APPLN. INFO.:

Gases containing volatile organic compds. (VOCs) and contaminating particles such

as microorganisms, bacteria or viruses, especially indoor air from climate controlled rooms or refrigerators, are sterilized and purified by electron beam ionization. The gases are contacted with an accelerated electron flux, breaking or destroying the particles by ionization. The treated gases are passed through a porous sorbent containing oxidizing agents, redox agents and O-containing compds. for conversion of the VOCs to CO2 and SO2.

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 1

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:555639 HCAPLUS

DOCUMENT NUMBER: 129:177977

ORIGINAL REFERENCE NO.: 129:36105a,36108a

TITLE: Purification of metal silicon powders for solar cells
INVENTOR(S): Nakakawa, Junzo; Nishida, Kazuki
PATENT ASSIGNEE(S): Toho Zinc Co., Ltd., Japan
SOURCE: Top Kokai Tell

CODEN: JKXXAF

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ JP 10226510 A 19980825 JP 1997-39934 19970207 JP 1997-39934 19970207 PRIORITY APPLN. INFO.:

The title process consists of stirring metal Si powders in H2SO4-containing aqueous solns. while feeding O to remove Cu. The Si powders may contain waste Cu catalysts from silane manufacturing step. The Si powder may be washed with water to remove Cl. The Cu-containing aqueous solution may be reused as Cu

source in Zn refining. The process is useful for manufacture of high-purity Si for solar cells.

ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:459777 HCAPLUS DOCUMENT NUMBER: 129:96855

ORIGINAL REFERENCE NO.: 129:19953a,19956a

Process for the production and oxidative purification TITLE:

of triacetin

INVENTOR(S): Khramov, Miknaii
PATENT ASSIGNEE(S): Industrias Monfel S.A. de C.V., Mex.
SOURCE: U.S., 6 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English English

FAMILY ACC. NUM. COUNT: 1

APPLICATION NO. PATENT NO. DATE KIND DATE _____ ----_____ US 5777157 A 19980707 US 1996-584955 19960111 US 1996-584955 19960111 PRIORITY APPLN. INFO.:

Odorless and colorless triacetin is obtained without the use of activated carbon or high-vacuum distillation by an initial separation of triacetin from

composition of triacetin, acetic acid, and acetic anhydride, and the separated triacetin is contacted with an aqueous solution containing an oxidant (e.g., aqueous NaOH

and H2O2) to form the purified product.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 14

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:112689 HCAPLUS

DOCUMENT NUMBER: 128:180160

ORIGINAL REFERENCE NO.: 128:35551a,35554a

TITLE: Preparation and purification of N-(long-chain

acyl)iminodicarboxylic acids or their salts

Tanahashi, Shinichiro; Abe, Hideyuki; Nakamura, INVENTOR(S):

Hidetake; Maeda, Toshiji

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10045693	A	19980217	JP 1996-205796	19960805
PRIORITY APPLN. INFO.:			JP 1996-205796	19960805

OTHER SOURCE(S): MARPAT 128:180160

Surface-active and antimicrobial RCON[(CH2)mCO2M1](CH2)nCO2M2 (I; R = C5-21 alkyl, alkenyl, hydroxyalkyl; M1, M2 = H, cation; m, n = 1-3) are purified by the following processes in the order (1)-(2)-(3) or

(2)-(1)-(3): (1) adding mineral acids and separating organic layers containing

aqueous layers, (2) adding oxidizing agents, and (3) evaporating to remove H2O, solvents, and odorous substances. I are prepared by (A) reaction of HN[(CH2)mCO2M1](CH2)nCO2M2 (M1, M2, m, n = same as I) with RCOX (R = same as I; X = halo) and optional salt exchange or (B) reaction of HN[(CH2)mCN](CH2)nCO2M2 (M2, m, n = same as I) with RCOX, hydrolysis of the resulted RCON[(CH2)mCN](CH2)nCO2M2 (R, M2, m, n = same as I), and optional salt exchange. The purified I show good hue, no odor and impurity, and storage stability.

ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:683188 HCAPLUS DOCUMENT NUMBER: 127:348394

127:348394

ORIGINAL REFERENCE NO.: 127:68309a,68312a

STNaak1

TITLE: Purification of zinc sulfate for production of basic

zinc carbonate

Ji, Zuomin AUTHOR(S):

CORPORATE SOURCE: Shanghai Chemical Material Co., Shanghai, 200002,

Peop. Rep. China

Wujiyan Gongye (1997), (3), 37-38SOURCE: CODEN: WUGOFJ; ISSN: 1006-4990

PUBLISHER: Wujiyan Gongye Bianjib

Journal DOCUMENT TYPE: Chinese LANGUAGE:

The purification of ZnSO4 was studied by redox reaction and substitution

reaction to avoid contamination. The principle of ZnSO4 solution purification

was

proposed. KMn04, Ca(ClO3)2, NaClO3 and H2O2 were used as oxidizing agent

to oxidize low valence metal impurities in the solution

ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

1997:150945 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 126:176612

ORIGINAL REFERENCE NO.: 126:34004h,34005a

TITLE: Treatment of raw water with synthetic polymer

composite membrane modules

INVENTOR(S): Hirose, Masahiko; Kawada, Ichiro

Nitto Denko Corp, Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 5 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 09000893	A	19970107	JP 1995-154560	19950621
PRIOR	ITY APPLN. INFO.:			JP 1995-154560	19950621
AB	The process consist	additi	on of scale	inhibitors, preferably	at 0.05-2000
ppm, to raw water containing hardness components in the presence of dissolved					
oxidizing agents and then treatment of the water with synthetic polymer					
composite membrane modules. The process provides efficient sterilization					
and slime control and long-life of the membranes.					

ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:618184 HCAPLUS

DOCUMENT NUMBER: 125:247387

ORIGINAL REFERENCE NO.: 125:46233a,46236a

TITLE: Purification of 4,4'-bis(dialkylamino)benzophenones as

sensitizers for photocuring

INVENTOR(S): Hamano, Hiroaki

PATENT ASSIGNEE(S): Kawaguchi Chemical Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 3 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO. KIND DATE APPLICATION NO. DATE JP 08208573 A 19960813 _____ -----A 19960813 JP 1995-14858 19950201 PRIORITY APPLN. INFO.: JP 1995-14858 19950201

MARPAT 125:247387 OTHER SOURCE(S):

P-R2NC6H4COC6H4NR2-p (I; R = C1-4 alkyl), useful as sensitizers for photocuring (no data), are purified by decomposing and removing of blue byproducts with oxidizing agents. Crude I (R = Et) (II) was treated with aqueous H2O2 and Bu4NBr in xylene at 50° for 5 h, washed with aqueous HCl followed by H2O, evaporated, and recrystd. from Me2CHOH to give 80% II with m.p. 95.6-95.8°.

ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:179029 HCAPLUS DOCUMENT NUMBER: 124:237994

ORIGINAL REFERENCE NO.: 124:43993a,43996a

Purification of rhodium from acidic hydrochloric acid TITLE:

solutions containing impurities

INVENTOR(S): Komoda, Yasuo; Akahori, Michihiro; Nakamura, Masayuki;

Takekoshi, Shigeki; Tateda, Sayuri

PATENT ASSIGNEE(S): Kamioka Kogyo Kk, Japan

Jpn. Kokai Tokkyo Koho, 4 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----_____ A 19960116 JP 1994-172090 19940630 JP 1994-172090 19940630 JP 08013053 PRIORITY APPLN. INFO.: The process comprises adding oxidizing agents to the solns., heating the solns. for strengthening of complexes, diluting the solns. with H2O, immediately passing the solns. through anion exchange resins for adsorption of Pt-group metals, and selectively separating only Rh from the resins. High-purity Rh is efficiently recovered by the simple process using only the resins.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L2 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:316174 HCAPLUS DOCUMENT NUMBER: 122:80711

ORIGINAL REFERENCE NO.: 122:15331a,15334a

TITLE: Purification of 1,1,2-trichloroethane in the

INVENTOR(S):

production of ioversol
McCarhy, William Z.
Mallinckrodt Medical, Inc., USA
PCT Int. Appl., 12 pp. PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 9427956 W: AU, CA, JP	A1 19941208	WO 1994-US5903	19940525
RW: AT, BE, CH, US 5396003 AU 9468366 EP 700377 EP 700377	DE, DK, ES, FR, A 19950307 A 19941220 A1 19960313 B1 19990331	GB, GR, IE, IT, LU, MC, US 1993-68496 AU 1994-68366 EP 1994-916814	NL, PT, SE 19930527 19940525 19940525
R: IT PRIORITY APPLN. INFO.:			A 19930527 W 19940525

AB A process is disclosed for the recovery and purification of 1,1,2-trichloroethane (I) from intermediates in the production of the x-ray contrast agent ioversol. The method involves 4 steps: (1) distillation of I from the intermediates; (2) extraction of I with an aqueous oxidizing agent to form

water-saturated I; (3) drying the water-saturated I by azeotropic distillation; and (4)

distilling I to remove higher-boiling impurities. The oxidizing extraction converts sulfides to water-soluble and/or higher-boiling sulfoxides, sulfones, etc., which are removed in the next steps. Only acidic oxidants such as chlorine water may be used. Basic aqueous oxidants such as NaOCl, as well as O2 and H2O2, pose an explosion risk and are unsuitable. In an example on a pilot-plant test scale, used I was spiked with 100 ppm Me2S and 200 ppm each Me2S2 and Me2SO. Continuous processing as described with chlorine water oxidant and a drying distillation column in step 3 gave I with <100 ppm H2O and <1 ppm organic S compds.; a final vacuum distillation gave highly

purified I.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:235164 HCAPLUS

DOCUMENT NUMBER: 122:13104

ORIGINAL REFERENCE NO.: 122:2729a,2732a

TITLE: Purification of hexafluorosilicic acid

INVENTOR(S): Tateno, Toshio; Kawasawa, Yoshio; Okada, Shoji; Okada,

Tomokatsu

PATENT ASSIGNEE(S): Morita Kagaku Kogyo, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 06247708	A	19940906	JP 1993-54998	19930219
	JP 3436381	В2	20030811		
PRIO:	RITY APPLN. INFO.:			JP 1993-54998	19930219
AB	The process comprise	es mixi	ng 20-65%	aqueous solns. containing	1 mol HF and
0.3-	1.3				
	O'E 4 '11' - '31'			7714-04 11 11-11-1	1.10 - 1.1 1 - 1.0

remove compds. of S, O, B, and As by oxidation

ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2009 ACS on STN L2

ACCESSION NUMBER: 1972:488284 HCAPLUS DOCUMENT NUMBER: 77:88284

ORIGINAL REFERENCE NO.: 77:14569a,14572a

Purification of N-substituted α-pyrrolidones

INVENTOR(S): INVENTOR(S): Uchiyama, Hiroshi; Ozawa, Shuji PATENT ASSIGNEE(S): Teijin Ltd.

SOURCE: Jpn. Tokkyo Koho, 3 pp.

CODEN: JAXXAD

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 47022225 B4 19720622 JP 1970-43072 19700520 19700520

AΒ Coloring matters contained in crude N-substituted α -pyrrolidones could be removed by treating with an oxidizing agent. E.g., crude N-methyl- α -pyrrolidone manufactured from α -butyrolactone and MeNH2 was heated 30 min at 70° with KMnO4, the mixture filtered, and the filtrate distilled in vacuo to give colorless product. Other oxidizing agents used are K2Cr2O7, CuCl, etc.